

IN THE CLAIMS:

Cancel claims 1-3, 6-8, 10, 11, and 28 without prejudice or disclaimer.

Please amend the claims and add new claims 31-44 as shown in the below
LISTING OF CLAIMS.

Claims 1-3 (cancelled)

Claim 4 (currently amended): The isolated polynucleotide according to claim 4 ~~9~~, wherein the polynucleotide is an RNA or a DNA.

Claim 5 (currently amended): An isolated ~~The~~ polynucleotide ~~according to claim 3,~~ comprising the ~~nucleic acid~~ nucleotide sequence ~~as shown in~~ of SEQ ID No. 1.

Claim 6-8 (cancelled)

Claim 9 (currently amended): An isolated ~~The~~ polynucleotide sequence ~~according to claim 3, which codes for~~ which encodes a polypeptide ~~containing~~ comprising the amino acid sequence ~~shown in~~ of SEQ ID No. 2.

Claims 10 and 11 (cancelled)

Claim 12 (original): An Escherichia coli strain DH5amcr/pEC-XK99EsigMal_{ex} deposited as DSM 14409.

Claim 13 (withdrawn): A method for the production of L-amino acids in coryneform bacteria, comprising:

a) fermenting, in a medium, the coryneform bacteria producing the desired L-amino acid, in which bacteria at least the endogenous sigM gene or nucleotide sequences coding therefor are enhanced.

Claim 14 (withdrawn): The method according to claim 13, further comprising:

b) concentrating the L-amino acid in the medium or in the cells of the bacteria.

Claim 15 (withdrawn): The method according to claim 14, further comprising:

c) isolating the L-amino acid.

Claim 16 (withdrawn): The method according to claim 13, wherein the L amino acids are lysine.

Claim 17 (withdrawn): The method according to claim 13, wherein at least the sigM gene or nucleotide sequences coding for the latter are overexpressed.

Claim 18 (withdrawn): The method according to claim 13, wherein additional genes of the biosynthesis pathway of the desired L-amino acid are enhanced in the bacteria.

Claim 19 (withdrawn): The method according to claim 13, wherein bacteria are used in which at least some of the metabolic pathways that reduce formation of the desired L-amino acid are excluded.

Claim 20 (withdrawn): The method according to claim 13, wherein a strain transformed by a plasmid vector is used, and the plasmid vector carries the nucleotide sequence coding for the sigM gene.

Claim 21 (withdrawn): The method according to claim 13, wherein expression of the polynucleotide(s) coding for the sigM gene is enhanced.

Claim 22 (withdrawn): The method according to claim 13, wherein expression of the polynucleotide(s) coding for the sigM gene is overexpressed.

Claim 23 (withdrawn): The method according to claim 13, wherein the regulatory properties of the polypeptide for which the polynucleotide sigM codes are increased.

Claim 24 (withdrawn): The method according to claim 13, wherein the bacteria being fermented comprise, at the same time, one or more genes which are enhanced or overexpressed; wherein the one or more genes is/are selected from the group consisting of:

the gene dapA coding for dihydrodipicolinate synthase,

the gene gap coding for glyceraldehyde-3-phosphate dehydrogenase,

the gene tpi coding for triose phosphate isomerase,

the gene pgk coding for 3-phosphoglycerate kinase,

the gene zwf coding for glucose-6-phosphate dehydrogenase,

the gene pyc coding for pyruvate carboxylase,

the gene mqo coding for malate quinone oxidoreductase,

the gene lysC coding for a feed-back resistant aspartate kinase,

the gene lysE coding for lysine export,

the gene hom coding for homoserine dehydrogenase,

the gene ilvA coding for threonine dehydratase or the allele ilvA(Fbr) coding for a feed-back resistant threonine dehydratase,

the gene ilvBN coding for acetohydroxy acid synthase,

the gene *ilvD* coding for dihydroxy acid dehydratase, and
the gene *zwa1* coding for the Zwa1 protein.

Claim 25 (withdrawn): The method according to claim 13, wherein the bacteria being fermented comprise, at the same time, one or more genes which are attenuated; wherein the one or more genes is/are selected from the group consisting of:

the gene *pck* coding for phosphoenol pyruvate carboxykinase,
the gene *pgi* coding for glucose-6-phosphate isomerase,
the gene *poxB* coding for pyruvate oxidase, and
the gene *zwa2* coding for the Zwa2 protein.

Claim 26 (withdrawn): The method according to claim 13, wherein microorganisms of the genus *Corynebacterium* are used.

Claim 27 (withdrawn): The method according to claim 26, wherein the *Corynebacterium glutamicum* strain DSM5715/pEC-XK99EsigMal_{ex} is used.

Claim 28 (cancelled)

Claim 29 (withdrawn): A method of finding RNA, cDNA and DNA in order to isolate nucleic acids, or polynucleotides or genes, that code for sigma factor M or are very similar to the sequence of the *sigM* gene, which method comprises comprising contacting the RNA, cDNA, or DNA with hybridization probes comprising polynucleotide sequences according to claim 1.

Claim 30 (withdrawn): The method according to claim 29, wherein arrays, micro arrays or DNA chips are used.

Claim 31 (new): An isolated polynucleotide comprising nucleotides 236 to 907 of SEQ ID NO: 1.

Claim 32 (new): An isolated polynucleotide comprising the complete complement of the polynucleotide of claim 31.

Claim 33 (new): An isolated polynucleotide comprising the complete complement of the polynucleotide of claim 5.

Claim 34 (new) A vector comprising the polynucleotide of any one of claims 5, 9, or 31 to 33.

Claim 35 (new): The vector according to claim 34, wherein said vector is in Escherichia coli DH5amcr/pEC-XK99sigMa1ex deposited as DSM14409.

Claim 36 (new): A host cell comprising the vector of claim 30.

Claim 37 (new): A host cell comprising the polynucleotide of any one of claims 5, 9, or 31 to 33.

Claim 38 (new): An isolated polynucleotide comprising at least 21 consecutive nucleotides from SEQ ID NO: 1 or the complete complement of SEQ ID NO: 1.

Claim 39 (new): An isolated polynucleotide comprising at least 23 consecutive nucleotides from SEQ ID NO: 1 or the complete complement of SEQ ID NO: 1.

Claim 40 (new): A vector comprising the polynucleotide of claim 38.

Claim 41 (new): A vector comprising the polynucleotide of claim 39.

Claim 42 (new): The polynucleotide according to claim 38, wherein the polynucleotide is a probe or a primer.

Claim 43 (new): The polynucleotide according to claim 39, wherein the polynucleotide is a probe or a primer.

Claim 44 (new): A recombinant coryneform bacterium, wherein the sigma factor M gene consisting of a polynucleotide, which encodes a polypeptide having the amino acid sequence of SEQ ID NO:2, is over-expressed.